MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

NUTRIENT-REDUCING WASTEWATER TREATMENT SYSTEM DESIGNATION FORM

DATE: July 18, 2006

APPLICATION SUBMITTAL DATE(S): June 28, 2005, August 8, 2005, September 7, 2005, September 26, 2005 and January 18, 2006

SYSTEM MANUFACTURER: Santec Corporation

SYSTEM NAME(S): Santec extended aeration process

DESIGNATED TREATMENT LEVEL[1]: Level 2 (Can use 14 mg/L for effluent nitrate (as N) concentration for subsurface wastewater treatment system in nitrate dilution analysis)

CONDITIONS:

A. This approval is only for Santec extended aeration systems that have a design flow over 5,000 gallons per day and are required to obtain a Montana Ground Water Pollution Control System (MGWPCS) Permit pursuant to Administrative Rules of Montana (ARM) 17.30.1022. This requirement is due to the relatively high operation and maintenance requirements for this system that are less likely to be met for smaller systems.

B. This approval does not extend to Santec systems that serve facilities with either highly variable wastewater flows or wastewater quality. These facilities include but are not limited to schools, churches, and camps. To ensure consistent wastewater flows, this approval is valid only for facilities where at least 90% of the design wastewater flow is coming from residential units (or commercial units producing residential-strength wastewater) where consistent year-round occupancy/use is anticipated.

C. Due to concerns regarding temperature impacts on the denitrification process, all of the equalization, anoxic and aeration basins shall be located inside a fully enclosed building that is maintained at a minimum temperature of 50 degrees Fahrenheit year-round.

D. This approval is also valid for Santec systems that have additional treatment steps, such as disinfection, as long as the additional treatment does not affect the basic denitrification treatment processes.

APPROVED BY: Eric Regensburger

NOTES:

1 The definitions of level 1a, level 1b, and level 2 are in ARM 17.30.702(9), (10) and (11), respectively.